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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,175	07/19/2001	Kunal N. Taravade	1003-0603	9068

7590

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EXAMINER

WOOD, KEVIN S

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 06/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/909,175

Applicant(s)

TARAVADE, KUNAL N.

Examiner

Kevin S Wood

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-21 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-12 is/are rejected.
- 7) ☒ Claim(s) 6 and 12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5 and 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,515,429 to Smith et al.

Referring to claim 1, Smith et al. discloses all the limitations claimed method. Smith et al. discloses a method of controlling the transmission of a light signal, comprising: transmitting the light signal through an optical fiber; and receiving the light signal with a light receiving unit, where the light receiving unit refracts the light signal so that the light signal is substantially prevented from being transmitted through the light receiving unit if an intensity level of the light signal is greater than a predetermined intensity threshold. See col. 2, lines 16-44. Smith et al. also discloses that the light signal may be transmitted by an optical fiber before being input into the device. See col. 4, lines 24-27.

Referring to claim 2, Smith et al. discloses all the limitations of the claimed method. Smith et al. discloses that the input optical signal may be supplied by a light source such as a luminescent diode or a semiconductor laser. See col. 4, lines 24-27.

Referring to claim 3, Smith et al. discloses all the limitations of the claimed method. Smith et al. discloses that the output optical signal could be output by an optical fiber. See col. 4, lines 27-29.

Referring to claim 4, Smith et al. discloses all the limitations of the claimed method. Smith et al. discloses that the output optical signal could be output to an optical detector. See col. 4, lines 27-29.

Referring to claim 5, Smith et al. discloses all the limitations of the claimed method. Smith et al. discloses that raising the intensity level of the light signal so that the intensity level is greater than the intensity threshold level causes the index of refraction of the core or cladding to change so that light diverges and is not transmitted.

Referring to claim 7, Smith et al. discloses all the limitations of the claimed method. Smith et al. discloses that the light signal is transmitted through the device when the intensity of the light signal is less than the threshold level.

Referring to claim 8, Smith et al. discloses all the limitations claimed invention. Smith et al. discloses an arrangement for controlling the transmission of a light signal, comprising: a first optical fiber for transmitting the light signal; and a light receiving unit for receiving the light signal from the first optical fiber, where the light receiving unit refracts the light signal so that the light signal is substantially prevented from being transmitted through the light receiving unit if an intensity level of the light signal is

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greater than a predetermined intensity threshold. See col. 2, lines 16-44. Smith et al. also discloses that the light signal may be transmitted by an optical fiber before being input into the device. See col. 4, lines 24-27.

Referring to claim 9, Smith et al. discloses all the limitations of the claimed invention. Smith et al. discloses that the input optical signal may be supplied by a light source such as a luminescent diode or a semiconductor laser. See col. 4, lines 24-27.

Referring to claim 10, Smith et al. discloses all the limitations of the claimed invention. Smith et al. discloses that the output optical signal could be output by an optical fiber. See col. 4, lines 27-29.

Referring to claim 11, Smith et al. discloses all the limitations of the claimed invention. Smith et al. discloses that the output optical signal could be output to an optical detector. See col. 4, lines 27-29.

Allowable Subject Matter

4. Claims 13-21 are allowed.
5. Claims 6 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter:

Referring to claim 6, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose the refracting of the light signal at the

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interface if the index of refraction of the first optical material does not match the nonlinear index of refraction of the second optical material.

Referring to claim 12, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose that the light signal is refracted at an interface if the index of refraction of the first optical material does not match the nonlinear index of refraction of the second optical material.

Referring to claims 13-20, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose that the light signal is refracted at the interface such that the light signal is substantially prevented from being transmitted through the light receiving unit if the index of refraction of the first optical material does not match the nonlinear index of refraction of the second optical material.

Referring to claims 21, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose that the light signal is refracted at the interface such that the light signal is substantially prevented from being transmitted through the light receiving unit if the index of refraction of the first optical material does not match the nonlinear index of refraction of the second optical material.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,348,688 to Sharp et al.

U.S. Patent No. 5,202,786 to Boyle et al.

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U.S. Patent No. 4,973,125 to Normandin

U.S. Patent No. 4,952,016 to Adams et al.

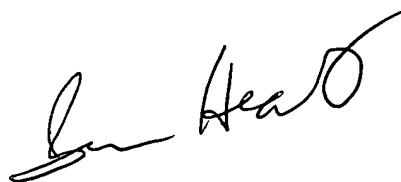
Each of these references discloses an optical device that uses nonlinear materials to limit the intensity of optical signals.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin S Wood whose telephone number is (703) 605-5296. The examiner can normally be reached on Monday-Thursday (7am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B Bovernick can be reached on (703) 308-4819. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 307-0956.

KSW
June 13, 2002



Brian Healy
Primary Examiner